



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: JT9D-7R4G2
UNIQUE ID NUMBER: 1PW029
COMBUSTOR:
ENGINE TYPE: TF

BYPASS RATIO: 4.8
PRESSURE RATIO (π_{00}): 26.3
RATED THRUST (F_{00}) (kN): 243.5

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F ₀₀ (g/kN) or SN	2.9	20.7	63.2	7.5
AS % OF ORIGINAL LIMIT	14.9	17.6	68.3	40.3
AS % OF CAEP/2 LIMIT (NO _x)			85.4	
AS % OF CAEP/4 LIMIT (NO _x)			103.5	
AS % OF CAEP/6 LIMIT (NO _x)			117.7	
AS % OF CAEP/8 LIMIT (NO _x)			140.7	

DATA STATUS

- PRE-REGULATION
x CERTIFICATION
- REVISED (SEE REMARKS)

TEST ENGINE STATUS

- NEWLY MANUFACTURED ENGINES
x DEDICATED ENGINES TO PRODUCTION STANDARD
- OTHER (SEE REMARKS)

EMISSIONS STATUS

x DATA CORRECTED TO REFERENCE
(ANNEX 16 VOLUME II)

CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)
x OUT OF PRODUCTION (DATE: -)
- OUT OF SERVICE (DATE: -)

MEASURED DATA

MODE	POWER SETTING (%F ₀₀)	TIME (minutes)	FUEL FLOW (kg/s)	HC	CO	NO _x	SMOKE NUMBER
TAKE-OFF	100	0.7	2.429	0.15	0.74	41.30	6.8
CLIMB OUT	85	2.2	1.880	0.14	0.63	29.50	
APPROACH	30	4.0	0.659	0.18	1.40	8.80	
IDLE	7	26.0	0.224	1.55	11.82	3.80	
LTO TOTAL FUEL (kg) or EMISSIONS (g)			858	620	4582	14253	-
NUMBER OF ENGINES				5	5	5	3
NUMBER OF TESTS				6	6	6	3
AVERAGE D _p /F ₀₀ (g/kN) or AVERAGE SN (MAX)				2.6	19.5	60.5	6.8
SIGMA (D _p /F ₀₀ in g/kN, or SN)							
RANGE (D _p /F ₀₀ in g/kN, or SN)							

ACCESSORY LOADS

POWER EXTRACTION 0 (kW)
STAGE BLEED 0 (% CORE FLOW)

AT - POWER SETTINGS
AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	
TEMPERATURE (K)	271-299
ABS HUMIDITY (kg/kg)	

FUEL

SPEC	Jet A
H/C	
AROM (%)	

MANUFACTURER: Pratt & Whitney
TEST ORGANIZATION: P&WA
TEST LOCATION: East Hartford, CT
TEST DATES: 26/10/1981-10/09/1983

REMARKS

Compliance with Fuel Venting requirements:

- ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)